



[4910-13-P]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

**[Docket No. FAA-2013-0634; Directorate Identifier 2012-SW-023-AD;
Amendment 39-17725; AD 2014-01-02]**

RIN 2120-AA64

Airworthiness Directives; Eurocopter Deutschland GmbH Helicopters

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule.

SUMMARY: We are adopting a new airworthiness directive (AD) for certain Eurocopter Deutschland GmbH (Eurocopter) Model EC135P2+ and EC135T2+ helicopters. This AD requires inspecting the mechanical air conditioning system compressor bearing block upper bearing (upper bearing) for corrosion, leaking grease, condensation, or water. This AD was prompted by metallic debris from an upper bearing found in the air inlet areas of both engines in a Model EC135P2+ helicopter. The actions of this AD are intended to prevent metallic debris from damaging the engine, causing loss of engine power, and subsequent loss of helicopter control.

DATES: This AD is effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

The Director of the Federal Register approved the incorporation by reference of a certain document listed in this AD as of [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES: For service information identified in this AD, contact American Eurocopter Corporation, 2701 N. Forum Drive, Grand Prairie, TX 75052; telephone (972) 641-0000 or (800) 232-0323; fax (972) 641-3775; or at <http://www.eurocopter.com/techpub>. You may review the referenced service information at the FAA, Office of the Regional Counsel, Southwest Region, 2601 Meacham Blvd., Room 663, Fort Worth, Texas 76137.

Examining the AD Docket

You may examine the AD docket on the Internet at <http://www.regulations.gov> or in person at the Docket Operations Office between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this AD, the foreign authority's AD, any incorporated-by-reference service information, the economic evaluation, any comments received, and other information. The street address for the Docket Operations Office (phone: 800-647-5527) is U.S. Department of Transportation, Docket Operations Office, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC 20590.

FOR FURTHER INFORMATION CONTACT: Matt Wilbanks, Aviation Safety Engineer, Regulations and Policy Group, Rotorcraft Directorate, FAA, 2601 Meacham Blvd., Fort Worth, Texas 76137; telephone (817) 222-5110; email matt.wilbanks@faa.gov.

SUPPLEMENTARY INFORMATION:

Discussion

On July 23, 2013, at 78 FR 44050, the Federal Register published our notice of proposed rulemaking (NPRM), which proposed to amend 14 CFR part 39 by adding an

AD that would apply to Eurocopter Model EC135P2+ and EC135T2+ helicopters, serial numbers 870, 872, 873, 879, 883, 884, 888, 893, 900, 905, 911, 914, 916, 917, 923, and 926, with an upper bearing, part number (P/N) L210M1872105, installed.

The NPRM proposed to require inspecting the upper bearing for corrosion, leaking grease, condensation, or water. The proposed requirements were intended to prevent metallic debris from damaging the engine, causing loss of engine power, and subsequent loss of helicopter control.

The NPRM was prompted by AD No. 2011-0111R1, dated September 22, 2011, issued by the European Aviation Safety Agency (EASA), which is the Technical Agent for the Member States of the European Union. EASA AD No. 2011-0111R1 revises EASA AD No. 2011-0111, dated June 10, 2011, to correct an unsafe condition for certain Model EC135P2+ and EC135T2+ helicopters. EASA advises that metallic debris was found within the air inlet area of both engines during a pre-flight check of an EC135 P2+ helicopter. A subsequent investigation showed that the debris came from the bearing cage of a ball bearing in the air conditioning compressor bearing block, and that it damaged the compressor stage of one of the engines to such an extent that the engine had to be overhauled, according to EASA.

EASA notes that as this mechanical air conditioning system was introduced recently on the production line, only a limited number of helicopters are affected. But if not detected and corrected, this unsafe condition “could lead to further cases of bearing case failure, possibly resulting in loss of engine power and reduced control of the helicopter,” EASA reports. EASA AD No. 2011-0111R1 requires repetitive inspections of the affected ball bearing for indications that the upper bearing is failing and, depending

on the findings, deactivating the air conditioning system.

Comments

We gave the public the opportunity to participate in developing this AD, but we received no comments on the NPRM (78 FR 44050, July 23, 2013).

FAA's Determination

These helicopters have been approved by the aviation authority of Germany and are approved for operation in the United States. Pursuant to our bilateral agreement with Germany, EASA, its technical representative, has notified us of the unsafe condition described in the EASA AD. We are issuing this AD because we evaluated all information provided by EASA and determined the unsafe condition exists and is likely to exist or develop on other helicopters of these same type designs and that air safety and the public interest require adopting the AD requirements as proposed.

Related Service Information

Eurocopter issued Emergency Alert Service Bulletin (EASB) EC135-21A-013, Revision 0, dated June 6, 2011, to provide instructions for inspections after debris from the bearing cage of a ball bearing was found in the air inlet area of both engines of an EC135P2+ helicopter. Eurocopter followed the EASB with Service Bulletin EC135-21-015, Revision 0, dated July 12, 2011, to introduce the replacement of the affected compressor bearing block with a "new, improved" compressor bearing block.

Costs of Compliance

We estimate that this AD affects 1 helicopter of U.S. Registry and that labor costs average \$85 per work-hour. Based on these estimates, we expect the following costs:

- Inspecting the upper bearing for corrosion, leaking grease, condensation or

water requires 4 work-hours for a labor cost of \$340. No parts are needed.

- Deactivating the air conditioning system requires 6 work-hours for a labor cost of \$510. No parts are needed.

Authority for this Rulemaking

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. Subtitle VII: Aviation Programs, describes in more detail the scope of the Agency's authority.

We are issuing this rulemaking under the authority described in Subtitle VII, Part A, Subpart III, Section 44701: "General requirements." Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on helicopters identified in this rulemaking action.

Regulatory Findings

This AD will not have federalism implications under Executive Order 13132. This AD will not have a substantial direct effect on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify that this AD:

(1) Is not a "significant regulatory action" under Executive Order 12866;

(2) Is not a “significant rule” under DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979);

(3) Will not affect intrastate aviation in Alaska to the extent that it justifies making a regulatory distinction; and

(4) Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

We prepared an economic evaluation of the estimated costs to comply with this AD and placed it in the AD docket.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

Adoption of the Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA amends 14 CFR part 39 as follows:

PART 39 - AIRWORTHINESS DIRECTIVES

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Amended]

2. The FAA amends § 39.13 by adding the following new airworthiness directive (AD):

2014-01-02 **Eurocopter Deutschland GmbH Helicopters:** Amendment 39-17725;

Docket No. FAA-2013-0634; Directorate Identifier 2012-SW-023-AD.

(a) Applicability

This AD applies to Eurocopter Deutschland GmbH (Eurocopter) Model EC135P2+ and EC135T2+ helicopters, serial numbers 870, 872, 873, 879, 883, 884, 888, 893, 900, 905, 911, 914, 916, 917, 923, and 926, with a mechanical air conditioning system compressor bearing block upper bearing (upper bearing) part number L210M1872105 installed, certificated in any category.

(b) Unsafe Condition

This AD defines the unsafe condition as metallic debris in the engine inlet areas. This condition could result in failure of an engine, loss of engine power, and subsequent loss of helicopter control.

(c) Effective Date

This AD becomes effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

(d) Compliance

You are responsible for performing each action required by this AD within the specified compliance time unless it has already been accomplished prior to that time.

(e) Required Actions.

Within 25 hours time-in-service (TIS):

(1) Visually inspect the upper bearing for corrosion, leaking grease, condensation, or water.

(2) If there is condensation but no corrosion, leaking grease, or water, repeat this inspection at intervals not to exceed 25 hours TIS.

(3) If there is no corrosion, leaking grease, condensation, or water, repeat this

inspection at intervals not to exceed 100 hours TIS.

(4) If there is corrosion, leaking grease, or water, deactivate the air conditioning system in accordance with the Accomplishment Instructions, Section 3.B.3, Paragraphs (a) through (ai) of Eurocopter Emergency Alert Service Bulletin No. EC135-21A-013, Revision 0, dated June 6, 2011.

(f) Alternative Methods of Compliance (AMOCs)

(1) The Manager, Safety Management Group, FAA, may approve AMOCs for this AD. Send your proposal to: Matt Wilbanks, Aviation Safety Engineer, Regulations and Policy Group, Rotorcraft Directorate, FAA, 2601 Meacham Blvd., Fort Worth, Texas 76137; telephone (817) 222-5110; email matt.wilbanks@faa.gov.

(2) For operations conducted under a 14 CFR part 119 operating certificate or under 14 CFR part 91, subpart K, we suggest that you notify your principal inspector, or lacking a principal inspector, the manager of the local flight standards district office or certificate holding district office, before operating any aircraft complying with this AD through an AMOC.

(g) Additional Information

(1) Eurocopter Service Bulletin EC135-21-015, Revision 0, dated July 12, 2011, which is not incorporated by reference, contains additional information about the subject of this AD. You may review a copy of this service information at the FAA, Office of the Regional Counsel, Southwest Region, 2601 Meacham Blvd., Room 663, Fort Worth, Texas 76137. For information on the availability of this material at the FAA, call (817) 222-5110.

(2) The subject of this AD is addressed in European Aviation Safety Agency

(EASA) AD No. 2011-0111R1, dated September 22, 2011. You may view a copy of the EASA AD in the AD Docket on the Internet at <http://www.regulations.gov> in Docket No. FAA-2013-0634.

(h) Subject

Joint Aircraft Service Component (JASC) Code: 2100, air conditioning system.

(i) Material Incorporated by Reference

(1) The Director of the Federal Register approved the incorporation by reference (IBR) of the service information listed in this paragraph under 5 U.S.C. 552(a) and 1 CFR part 51.

(2) You must use this service information as applicable to do the actions required by this AD, unless the AD specifies otherwise.

(i) Eurocopter Emergency Alert Service Bulletin No. EC135-21A-013, Revision 0, dated June 6, 2011.

(ii) Reserved.

(3) For Eurocopter service information identified in this AD, contact American Eurocopter Corporation, 2701 N. Forum Drive, Grand Prairie, TX 75052; telephone (972) 641-0000 or (800) 232-0323; fax (972) 641-3775; or at

<http://www.eurocopter.com/techpub>.

(4) You may view this service information at FAA, Office of the Regional Counsel, Southwest Region, 2601 Meacham Blvd., Room 663, Fort Worth, Texas 76137. For information on the availability of this material at the FAA, call (817) 222-5110.

(5) You may view this service information that is incorporated by reference at the National Archives and Records Administration (NARA). For information on the

availability of this material at NARA, call (202) 741-6030, or go to:

<http://www.archives.gov/federal-register/cfr/ibr-locations.html>.

Issued in Fort Worth, Texas, on January 2, 2014.

Lance T. Gant,

Acting Directorate Manager, Rotorcraft Directorate,
Aircraft Certification Service.

[FR Doc. 2014-00837 Filed 01/24/2014 at 8:45 am; Publication Date:

01/27/2014]